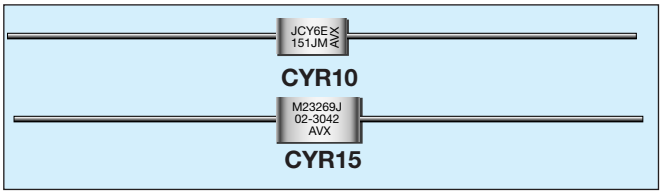
Glass Capacitors
CYR10, 15 (Established Reliability)
M23269/01, 02 (QPL to MIL-PRF-23269)

FAILURE RATE LEVELS M AND S

APPLICATIONS

These precision glass dielectric capacitors are QPL to Established Reliability specification MIL-PRF-23269. Fused monolithic construction provides excellent electrical performance, environmental immunity, stability and retraceability. These capacitors have axial leads.



PERFORMANCE CHARACTERISTICS

Temperature Coefficient: +140 ±25 ppm/°C from -55°C to +125°C. TC of all units will track and retrace to within ±5 ppm.

Life: At rated conditions (100% rated voltage, 125°C), capacitance change is less than:

±0.5% after 2,000 hours
±2.0% after 30,000 hours

At accelerated conditions (150% rated voltage, 125°C), capacitance change is less than:

±0.5% after 2,000 hours
±2.0% after 6,000 hours

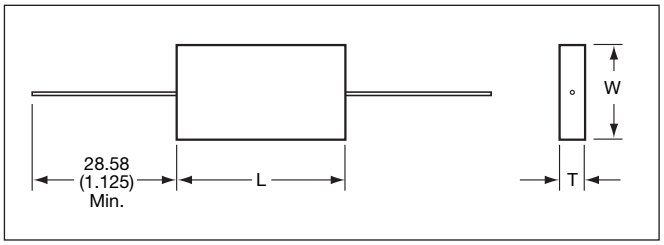
Insulation Resistance: A minimum of 100,000 megohms at 25°C and 10,000 megohms at 125°C.

Voltage/Temperature Rating: Voltage ratings are shown in the part number tables. The operating temperature range is -55°C to +125°C.

Radiation Resistance: The unique materials and construction techniques involved with glass capacitors make them ideal for use in radiation environments. After a total dose of nearly 10^8 rads (H_2O) glass capacitors exhibit only a minor change in capacitance (≤.5%) and an 8% change in dissipation factor. Furthermore, glass capacitors can operate in fast neutron flux environments of 10^{15} N $cm^{-2}sec^{-1}$ and experience little or no damage in component parameters.

Voltage Coefficient: Zero.

Additional performance details are given in the AVX "Performance Characteristics of Multilayer Glass Dielectric Capacitors" technical paper.



DIMENSIONS:

millimeters (inches)

Case Size	L	W	T	Lead Dia. +0.1(+0.004) -0.03(±0.001)
CYR10	8.74 ± 1.19 (0.344 ± 0.047)	4.37 ± .79 (0.172 ± 0.031)	1.98 ± .79 (0.078 ± 0.031)	.51 (0.020)
CYR15	11.91 ± 1.19 (0.469 ± 0.047)	6.76 ± .79 (0.266 ± 0.031)	2.77 ± 1.19 (0.109 ± 0.047)	.51 (0.020)

Note: Standard leads are solder-coated Dumet.

Glass Capacitors
Part Numbers and Ordering Information

HOW TO ORDER

M23269 / **01** — **3** **001**

Style
Military Specification
Established Reliability
Glass Capacitor

Case Size
01 = CYR10
02 = CYR15

Failure Rate
3 = M level 1%/1000 hrs.
7 = S level .001%/1000 hrs.
(100 volt rating only)

Capacitance Code
Capacitance value coded in accordance with MIL-PRF-23269 –
(see Part Number section)

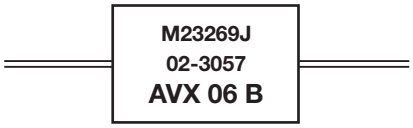
MARKING

CYR10

J = JAN Trademark
C = Capacitor
Y = Glass Dielectric
5 = Last digit of year
A = 4 week lot code

0R5 = Capacitance code –
0R5 = 0.5pF
J = Capacitance tolerance –
J = ±5%, G = ±2%, F = ±1%
M = Failure level
AVX = AVX Corporation

CYR15



M23269 = Military specification established reliability glass capacitor
J = JAN Trademark
02 = Case size (CYR15)
3 = Failure rate (M level)

057 = Dash Number – (capacitance in pF and capacitance tolerance)
AVX = AVX Corporation
06 = Year
B = Lot Code

RATINGS & PART NUMBER REFERENCE

Cap. Value (pF)	Part Number* Capacitance Tolerance		
	CYR10 M23269/01-		
500 Volts**	±.25pF	±.5pF	±5%
.5	*001	–	–
1.0	002	–	–
1.5	003	–	–
2.2	004	*005	–
2.7	006	–	–
3.0	007	008	–
3.3	009	–	–
3.6	010	011	–
3.9	012	–	–
4.3	013	014	–
4.7	015	–	–
5.1	016	–	–
5.6	017	–	*018
6.2	019	–	020
6.8	021	–	022
7.5	023	–	024
8.2	025	–	026
9.1	027	–	028
10	029	–	030
11	031	–	032
12	033	–	034
	±1%	±2%	±5%
13	–	*035	*036
15	–	037	038
16	–	039	040
18	–	041	042
20	–	043	044
22	–	045	046
24	–	047	048
27	*049	050	051
30	052	053	054
33	055	056	057
36	058	059	060
39	061	062	063
43	064	065	066
47	067	068	069
51	070	071	072
56	073	074	075
62	076	077	078

* Add first digit to indicate failure rate.
** S LEVEL = 100V rating for all values.

Cap. Value (pF)	Part Number* Capacitance Tolerance		
	CYR10 M23269/01- (cont'd.)		
500 Volts**	±1%	±2%	±5%
68	*079	*080	*081
75	082	083	084
82	085	086	087
91	088	089	090
100	091	092	093
110	094	095	096
120	097	098	099
130	100	101	102
150	103	104	105
160	106	107	108
180	109	110	111
200	112	113	114
300 Volts**	±1%	±2%	±5%
220	115	116	117
240	118	119	120
270	121	122	123
300	124	125	126
	CYR15 M23269/02-		
500 Volts**	±1%	±2%	±5%
220	*001	*002	*003
240	004	005	006
270	007	008	009
300	010	011	012
330	013	014	015
360	016	017	018
390	019	020	021
430	022	023	024
470	025	026	027
510	028	029	030
300 Volts**	±1%	±2%	±5%
560	031	032	033
620	034	035	036
680	037	038	039
750	040	041	042
820	043	044	045
910	046	047	048
1,000	049	050	051
1,100	052	053	054
1,200	055	056	057

* Add first digit to indicate failure rate.
** S LEVEL = 100V rating for all values.